ABSTRACT
Tuck devised a function $Q(x)$, associated with a function $D(x)$, whose positivity guarantees the absence of complex zeros of $D(x)$ close to the real $x$ axis, and observed that large values of $Q$ are very rare if $D$ is associated with the Riemann zeros. In an unusual and challenging application of random-matrix theory with P Shukla, this is explained by studying the probability distribution $P(Q)$ for functions $D$ with $N$ zeros corresponding to eigenvalues of the Gaussian unitary ensemble (GUE)